LAND APPLICATION OF BIOSOLIDS SITE INSPECTION FORM

| GENERAL INFORMATION: | <u>.</u> | DATE: 16 Au | ugust 2004 | | | | |
|--|---|-----------------------------------|---------------------------------|------------|---------------|--|--|
| COUNTY: Pr. Edward CONTRACTOR/MUNICIPALITY: Nutri- Blend, Inc. | | | | | | | |
| NAME (OWNER/OPERATOR) |): H. C. Anderson | 1 | | | | | |
| INSPECTED BY: C W Swa | nson | VDHBUR NO: #31 | VDHBUR NO: #31 | | | | |
| FIELD NO: Tract 503 Fields | ACRES: field | ACRES: field 1 is 10.4 acres(net) | | | | | |
| OTHERS PRESENT: Mr. Barr | rett | | | | | | |
| FIELD DATA/OBSERVATION | TIME: 11-1:00pm | | | | | | |
| WEATHER: Sunny, warm 80 | SOIL CONDITIONS | SOIL CONDITIONS: normal | | | | | |
| BIOSOLIDS SOURCE: Middlesex | | BIOSOLIDS TYPE: | BIOSOLIDS TYPE: Lime Stabilized | | | | |
| SOIL pH: | SOLIDS CONTENT | SOLIDS CONTENT OF BIOSOLIDS (%): | | | | | |
| APPLICATION RATE: 70 | % PAN rate | | | | | | |
| CROP AND EXPECTED YIEL | D: hay | | | | | | |
| LOAD TO DATE (WT): | () LIQUID | | | | | | |
| BIOSOLIDS APPLIED: | | (XX) DEWATERED | | | | | |
| MODE OF APPLICATION: | (XX) SURFACE | () SURFACE W/INCOF | RP. |) INJECTIO | N | | |
| APPLICATION LIMITED BY: | (XX) NITROGEN | () pH | () | METALS | | | |
| | () MAX. HYDRAULIC LOADING (LIQUID BIOSOLIDS) | | | | | | |
| () MAX. SOLIDS LOADING (15 DRY TONS/ACRE) | | | | | | | |
| (XX) OTHER (SPECIFY): Agronomic rate | | | | | | | |
| FIELD OBSERVATIONS | | | YES | NO | | | |
| E | ED: | | Field | | | | |
| | | applied | | | | | |
| | | | | | | | |
| UNIFORM APPLICATION: | | | | Grass has | | | |
| | | | | | | | |
| PROPER FIELD RECORDS: | | | | | | | |
| | | in June | | | | | |
| SIGNS OF RUNOFF: | | | | | XX on field 1 | | |
| Γ | TRUCKS NON-SPILL/WATERTIGHT: | | | Not | | | |
| | | | | observed | | | |
| (| CONDITION OF HA | XX | | | | | |
| ODORS PRESENT: (| X) NONE | () NORMAL | (|) ABOVE | | | |
| | | | NO | ORMAL* | | | |
| OVERALL CONDITION OF S | ITE: (XX) GOOI | O () FAIR | (|) POOR | | | |

COMMENTS: (*explain):

This was a complaint inspection. VDH received a telephone call from the Lynchburg DEQ office that they had received a call expressing concerns about pollution of a 12 acre SCS lake. A recent heavy rainfall event had sent large volumes off runoff through the lake (a five inch rainfall in a few hours). A thick deposit of residue had been left on the banks of the lake and vegetation appeared to be brown and dead along the lake banks that had recently been underwater. No dead fish were observed.

The concern was that biosolids were a contributing factor in the lake muck that had somehow killed vegetation. The only biosolids use farm site in the watershed is owned and farmed by Mr. H.C. Anderson (there are other farm lands in the watershed and this particular watershed is somewhat large, an estimate is a thousand acres). Mr. Anderson has five fields in Tract 503 along Route 667 listed in the VDHBUR 123 Permit. Fields 1, 2 and 3 drain back to this lake. Field 1 is 10.4 acres and was applied with biosolids on June 22 and 23, 2004. Fields 2 and 3 were not spread with biosolids. The total amount of Middlesex biosolids applied was 83 dry tons of biosolids. Field 1 is a hay field and it was inspected. This field has a some slope (maybe 15 feet fall from the paved road to the fence line separating field 2, a horizontal distance of about 300 feet). The hay on this field was about knee to waist high and visible pieces of biosolids could still be seen in places with most of the biosolids engulfed in the grass response to the applied nutrients. No visible signs of biosolids runoff were noted. This field is 0.4 of a mile in a straight line to the southern most tip of the lake and 0.25 miles to the creek bed that flows into this lake(stream flow is south to north).

A second lake to the east of this lake was briefly inspected at the dam area and a similar response of dead vegetation was noted there.

It appeared that the vegetation suffocated from deposits of muck and submergence in the high water levels. Mr. Swanson spoke with an erosion and sediment person with the Department of Conservation and Recreation (DCR), who stated that if normal backyard type grasses were submerged for 48 hours in a muddy water that they would die. The ten acres of applied biosolids appears to be a minor portion of this large watershed. It was noted that leaves that did not become submerged, or not submerged for enough time, on several bushes were still green even though lower leaves appeared brown and dead. This would indicate that herbicides or pesticides are not a factor (along with the lack of dead fish). The grass will be permanently damaged, but depending on the deposited sediment thickness some areas may need to be reseeded.

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VDH -DWE

Pr. Edward County Health Department Pr. Edward County Administrator

Nutri Blend, Inc.